



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,604	08/20/2001	Da-shan Shiu	010336	6762

23696 7590 10/19/2004

Qualcomm Incorporated  
Patents Department  
5775 Morehouse Drive  
San Diego, CA 92121-1714

EXAMINER

GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
----------	--------------

2684

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/933,604

Applicant(s)

SHIU ET AL.

Examiner

Tilahun B Gesesse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1- 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Willenegger (2002/0009061)

Claim 1, Willenegger discloses a method for controlling transmit power for a data transmission in a wireless communication system (figure 3) comprising:

Willenegger discloses processing data for transmission on a power controlled channel comprised of one or more data channels (figure 4, page 5, para 0060-0061), wherein each data channel is associated with a respective set of one or more available formats (figure 4, page 5, para 0060-0061) , wherein each format identifies a specific set of parameter values for processing data (figure 5, page 5 para 0062-page 7 para 0081 and figure 6), and wherein at any given time instance a specific format is selected for use for each of the one or more data channels from the associated set of one or more available formats; specifying a particular performance metric for each selected format for each of the one or more data channels, and transmitting the data for the one

or more data channels at a particular transmit power level to achieve the performance metric specified for each format selected for use (page 3, para 0039-page 5 para 0058).

Claims 2-6,22-24, Willenegger discloses a particular target block error rate and frame error rate and bit error rate and specific performance metric based on set points maintained for the available formats (page 3, para 004-page 4 para 0046).

Claim 7, Willenegger discloses the communication system is WCDMA system (page 5, para 0058).

Claim 8, Willenegger discloses data channel corresponds to a transport channel and each available format corresponds to a respective transport format (figures 4 and 5)

Claims 9-10,25-26,36-37,55-56,59-60 the wireless communication system is a cdma2000 and CMDA and W-CDMA system (page 5, para 0058).

Claim 11, which recites the step of implementing the features of method claim, is rejected for the same reason as set forth for the in claim 1.

Claim 12-16, Willenegger discloses the set point for each format is a particular target signal to noise plus interference (SNIR) (page 4, para 0044).

Claim 17-21, Willenegger discloses the set point for each available format is adjusted upward if any data block in the current time interval was received in error (page 4, para 0044-0045)

Claim 27,38,57, which recites the steps of implementing the features of apparatus, is rejected for the same reason as set forth in the claim 1, and further more, Willenegger discloses an apparatus (figure 3), comprising: Willenegger teaches a memory (page 9, para 0103), and a digital signal processor device (DSPD)

communicatively coupled to the memory and capable of interpreting digital information to (figure 7).

Claim 28,39,58 which recites the step of implementing the method, is rejected for the same reason as set forth in claim 1, and further more, Willenegger discloses determining a power offset associated with each of one or more formats selected for use in a current time interval for the one or more data channels (page 8 para 0092).

Claims 29-35,40-54, Willenegger discloses the transmit power level for the data transmission is further determined based on a reference power level (page 3 para 0041)

Claim 61,66,68,70, Willenegger discloses a power control unit (102) in a wireless communication system ( figure 1), comprising: a first power control loop operative to receive an indication of a signal quality of a received data transmission and a reference setpoint (page 3, para 0040) , and a to derive power control commands based on the indicated signal quality and the reference set point (page 3 para 0041), and a second power control loop coupled to the first power loop and operative to receive status of one or more formats used for the data transmission (page 4 para 0044-0045), and to adjust a set point for each one or more formats are selected from among a plurality of available formats, and wherein the reference set point is derived based on at least one set point for at least one available format (page 4 para 0044-0045 and figure 3).

Claims,62-64, Willenegger discloses each available formats is associated with a respective set point, target block rate (BLER), to a reference power level, (page 5 para 0060-0061 and figure 4).

Claim 65,67,69,71, Willenegger discloses a third power control loop coupled to the second loop and operative to provide a transmitter with the power offset or a power offset update for each of the one or more formats used for the data transmission (page 3, para 0040).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang et al (6,754,506) discloses a TDMA wireless communication system adjusts the power control target and transmission power based on uplink quality to enhance voice capacity (abstract).

Zhang et al (2002/0054578) disclose the transport format defines the transport block size , transmission time interval (TTI), and transport format combination indicator (TFCI) information users can obtain the bit rate and channel decoding parameters for each transport channel (page 7, para 0127\_page 8 para 0140 and figure 10).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Tilahun Gesesse*  
Primary Examiner  
US Patent and Trademark Office  
Tel. 703-308-5873

  
**TILAHUN GESESSE**  
**PATENT EXAMINER**

October 12, 2004